WHAT IS CLAIMED IS:

1. A human engineered anti-Ep-CAM antibody which binds specifically to human Ep-CAM comprising a heavy chain variable region comprising the amino acid sequence of SEQ ID NO: 19 or SEQ ID NO: 21.

2. A human engineered anti-Ep-CAM antibody which binds specifically to human Ep-CAM comprising a light chain variable region comprising the amino acid sequence of SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 35, SEQ ID NO: 37, SEQ ID NO: 39, SEQ ID NO: 41, SEQ ID NO: 43, or SEQ ID NO: 45.

3. A human engineered anti-Ep-CAM antibody which specifically binds to human Ep-CAM comprising a heavy chain variable region comprising the amino acid sequence of SEQ ID NO: 19 and a light chain variable region comprising the amino acid sequence of SEQ ID NO: 6.

4. A human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 which is a full length antibody.

5. A human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 which is a human IgG.

6. A human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 which is an antibody fragment.

7. A human engineered anti-Ep-CAM antibody of claim 6 wherein the antibody fragment is a $F(ab)_2$, Fab, Fv or ScFv.

8. A labeled antibody comprising the human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 bound to a detectable label.

9. An immobilized antibody comprising the human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 bound to a solid phase.

10. A conjugate comprising the human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 bound to a cytotoxic or non-cytotoxic agent.

11. A method for determining the presence of Ep-CAM protein comprising exposing a sample suspected of containing the Ep-CAM protein to the human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 and determining binding of the antibody to the sample.

12. A kit comprising the human engineered anti-Ep-CAM antibody of any one of claims 1 to 3 and instructions for using the human engineered anti-Ep-CAM antibody to detect the Ep-CAM protein.

13. Isolated nucleic acid sequence encoding the Ep-CAM antibody of claim 1.

14. Isolated nucleic acid sequence encoding the Ep-CAM antibody of claim 2.

15. Isolated nucleic acid sequence encoding the Ep-CAM antibody of claim 3.

16. A vector comprising the nucleic acid sequence of claim 13.

17. A vector comprising the nucleic acid sequence of claim 14.

18. A vector comprising the nucleic acid sequence of claim 15.

19. A host cell comprising the nucleic acid sequence of claim 13.

20. A host cell comprising the nucleic acid sequence of claim 14.

21. A host cell comprising the nucleic acid sequence of claim 15.

22. A process of producing human engineered anti-Ep-CAM antibody comprising culturing a host cell comprising the nucleic acid sequence of claim 13 so that the nucleic acid sequence is expressed.

23. A process of producing human engineered anti-Ep-CAM antibody comprising culturing a host cell comprising the nucleic acid sequence of claim 14 so that the nucleic acid sequence is expressed.

24. A process of producing human engineered anti-Ep-CAM antibody comprising culturing a host cell comprising the nucleic acid sequence of claim 15 so that the nucleic acid sequence is expressed.

25. The process of claim 22 further comprising recovering the human engineered anti-Ep-CAM antibody from the host cell culture.

26. The process of claim 23 further comprising recovering the human engineered anti-Ep-CAM antibody from the host cell culture.

27. The process of claim 24 further comprising recovering the human engineered anti-Ep-CAM antibody from the host cell culture.

28. A composition comprising the human engineered anti-Ep-CAM antibody of claim 1 and a pharmaceutically acceptable carrier or diluent.

29. A composition comprising the human engineered anti-Ep-CAM antibody of claim 2 and a pharmaceutically acceptable carrier or diluent.

30. A composition comprising the human engineered anti-Ep-CAM antibody of claim 3 and a pharmaceutically acceptable carrier or diluent.

31. A method for treating a mammal suffering from an Ep-CAM mediated disease, disorder or condition comprising administering a pharmaceutically effective amount of the human engineered anti-Ep-CAM antibody of claim 1 to the mammal.

32. A method for treating a mammal suffering from an Ep-CAM mediated disease, disorder or condition comprising administering a pharmaceutically effective amount of the human engineered anti-Ep-CAM antibody of claim 2 to the mammal.

33. A method for treating a mammal suffering from an Ep-CAM mediated disease, disorder or condition comprising administering a pharmaceutically effective amount of the human engineered anti-Ep-CAM antibody of claim 3 to the mammal.

34. The method of claim 31 further comprising administering a chemotherapeutic agent before, after or simultaneously with the human engineered anti-Ep-CAM antibody.

35. The method of claim 32 further comprising administering a chemotherapeutic agent before, after or simultaneously with the human engineered anti-Ep-CAM antibody.

36. The method of claim 33 further comprising administering a chemotherapeutic agent before, after or simultaneously with the human engineered anti-Ep-CAM antibody.

37. A method for determining the presence of a human antibody made by a subject in response to administration to the subject of the human engineered anti-Ep-CAM antibody of any one of claims 1, 2 or 3 comprising exposing a sample suspected of containing the human antibody to the human engineered anti-Ep-CAM antibody and determining the binding of the human antibody to the sample.

38. The method of claim 37 wherein the sample is blood, serum or plasma.